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- [(b)] (a) convert signals of one format to another format to support originating and reproduction devices based on different signal format standards.
- 10. The teleconferencing system of claim 27, wherein the AV path connects the workstation of a first participant at a first location to the workstation of a second of the participants at a second location via a third location, the system further comprising:
- (a) an AV signal switcher at the third location, coupled to the AV path to receive and route the AV signals to a location other than the third location if the AV signals are intended to be processed at the other location.
- 11. The teleconferencing system of claim 11, further comprising:
- (a) at least a first and a second codec at the first and second locations respectively, each configured to compress the AV signals and decompress compressed AV signals and wherein video and audio, compressed by the first codec, can be routed from the first location to the second location via the AV signal switcher without being decompressed at the third location.
- 12. The teleconferencing system of claim 11, where in the video image and spoken audio of the first participant routed to the second location, via the third location, can be reproduced at the workstations of both the first and second participants.
- 13. The teleconferencing system of claim 12, further comprising a video mosaic generator for combining the captured images of a first and second participant into a mosaic image for reproduction at least one workstation.

14. The teleconferencing system of claim 13, further comprising a distributed mosaic generator for combining a portion of the mosaic image with a captured image of a third

participant to generate a composite mosaic image for production at least one workstation.

- 15. The teleconferencing system of claim 12, further comprising an audio summer for receiving the captured audio of a first, second and third participant and combining the received audio of the second and third participants into an audio sum for reproduction at the workstation of the first participant.
- 17. The teleconferencing system of claim 12, wherein the system is configured to:
  - (a) route at least the AV signals among participant's workstations in such a way so as to optimize the carrying of AV signals between the workstations.
  - 18. [A] The teleconferencing system of claim 17, wherein the routing is optimized based on either the actual or anticipated state of the AV path.
  - 20. The teleconferencing system of claim 27, further comprising:
  - (a) a video mosaic generator for combining the captured images of a first and second participant into a mosaic image; and
- (b) a distributed mosaic generator for combining a portion of the mosaic image with a captured image of a third participant to generate a composite mosaic image of the captured images of the first, second and third participants.
- 21. The teleconferencing system of claim 27, further comprising:

(a) a video mosaic generator, for combining the captured images of a first and second of the participants into a mosaic image of the captured images, whereby the mosaic image can be reproduced at the workstations of the first and second participants; wherein the system is configured to

allow a participant to select the image one participant whose image is reproduced in the mosaic image upon which the mosaic image is replaced with the selected image.

- 22. The teleconferencing system of claim 27, further comprising:
- (a) a video mosaic generator for the captured images of a first and second of the participants into a mosaic image of the captured images; and
- (b) an audio summer for receiving the captured audio of first, second and third participants and combining the received audio of second and third participants into an audio sum for production at the workstation of the first participant.
- 23. (Proposed Amendment) A method of conducting a teleconference among a plurality of participants having workstations with associated monitors for displaying visual images, and with associated AV capture and reproduction capabilities for capturing and reproducing video images and spoken audio of the participants, the workstations being interconnected by a first network, the network providing a data path for carrying digital data signals among the workstations, the method comprising the steps of:
- (a) managing a data conference during which data is shared in real-time among a plurality of the participants and displayed on the monitors of their respective workstations;

- (b) [moving AV signals representing video images and spoken audio of the participants among said workstations;
- (c)] managing a videoconference during which the video image and spoken audio of one of the participants is reproduced in real-time at the workstation of another of the participants;
- [(d)](c) providing at least one AV [reproduction] device with associated capabilities of [reproducing] providing at least audio and/or video signals [at] to a workstation;
- [(e)](d) [defining] providing at least one directory of the AV [reproduction] devices and each device's associated capabilities;[and]
- [(f)](e) processing a <u>workstation</u> request for [a reproduction service] <u>provision of audio or video signals</u> to cause an appropriate AV [reproduction] device to provide the requested [reproduction service] <u>signals</u> to the workstation;
  - (f) tracking the audio and video capabilities associated with each workstation; and
- g) processing a call, from a second to a first participant, based on the capabilities associated with the first participant.

such that, if at least one capability of the set of capabilities consisting of audio capture, audio reproduction, video capture, video reproduction, and the capability of connecting to the first network, is not available to at least one of the participants, each of the plurality of participants can participate in the teleconference to the extent of the capabilities available to the participant.[.]

Cancel claims 24 and 25

- 26. The method of claim 23, further comprising the step of:
- (a) converting signals of one format to another format to enable the teleconferencing system to support capture and reproduction devices based on different signal format standards.
- 27. (Proposed Amendment) A teleconferencing system for conducting a teleconference among a plurality of participants, the system[s] comprising:
- (a) a workstation associated with each of at least three participants, each workstation having at least one origination and at least one reproduction capability, each selected from the group consisting of audio, video and data origination/reproduction capabilities;
- (b) a first network providing a data path for carrying digital data signals among the workstations;
- (c) [wherein the system is configured to manage a real-time data conference during which images based on digital data carried among the workstations is displayed on the workstation monitors of a plurality of the participants;
- (d)] an AV path for carrying AV signals, representing video images and spoken audio of the participants;

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- [(c)] (d) a plurality of AV [reproduction] devices each having capabilities for [reproducing] providing audio and/or video signals [at] to a workstation [and configured to address a request for audio and/or video reproduction services generated at one of the workstations]; and
- [(f)] (e) a directory of each AV [reproduction] device and its associated capabilities[; and], wherein the system is configured to:
  - [(g) an AV conference manager for managing the]
- manage a data conference during which images, based on digital data carried among the workstations, are displayed [on] at the workstation [monitor]s of a plurality of the participants;
  - manage [real-time] reproduction of [the] video images and audio [of one participant] at the workstation of [another] a participant[; where the AV conference manager and directory are configured to interact to] by addressing a workstation request for [an AV reproduction service, generated at a workstation,] provision of audio or video signals, to cause an appropriate AV [reproduction] device to provide the requested [reproduction service] signals to the workstation.
  - (iii) track the audio and video origination and reproduction capabilities associated with each workstation, and
  - (iv) to process a call, from a second to a first participant, based on which capabilities are associated with the workstation associated with first participant, such that

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- (1) if any capability of the set of capabilities consisting of audio capture, audio reproduction, video capture, video reproduction, and the capability of connecting to the first network, is not available to at least one of the participants, each participant can participate in the teleconference to the extent of the capabilities available to the participant.
- 28. (Proposed Amendment) A teleconferencing system for conducting a teleconference among a plurality of participants, the system[s] comprising:
  - (a) a workstation
    - (i) associated with each of at least two participants, and
    - (ii) having at least one origination and at least one reproduction capability,
    - (1) each selected from the group consisting of audio, video and data origination/reproduction capabilities;
  - (b) an AV path
    - (i) configured to carry AV signals,
      - (1) representing video images and spoken audio of the participants
    - (ii) among the workstations;
  - (c) at least one AV [reproduction] device
  - (i) having capabilities for [reproducing] providing at least audio and/or video signals
    - (1) [at] to a workstation, and
    - (ii) configured to address a request
      - (1) for providing audio and/or video [reproduction services] signals
      - (2) [generated at] to one of the workstations; and
  - (d) [a] at least one directory of

- (i) each workstation and its origination/reproduction capabilities, and/or
- (ii) each AV reproduction device and its associated capabilities, wherein the system is configured
  - (i) to manage the [real-time] reproduction
    - (1) of [the] video images and audio
    - (2) [of one participant
    - (3)] at the workstation of a [nother] participant
  - (ii) by interacting with the directory
  - (iii) to address a request,
  - (1) generated at a workstation, [for an AV reproduction service audio and/or video signals],
    - (2) [generated at a workstation] audio and/or video signals,
  - (iv) to cause an appropriate AV [reproduction] device
  - (1) to provide the requested [reproduction service] <u>signals</u> to the workstation
- (v) to track the audio and video origination and reproduction capabilities associated with each workstation, and
- (vi) to process a call, from a second to a first participant, based on which capabilities are associated with the first participant, and to

manage a teleconference among a plurality of participants such that, if at least one capability from the set of capabilities consisting of audio capture, audio reproduction, video capture, video reproduction, and the capability conducting a data conference is not available to any participant, cach participant can participate in the teleconference to the extent of the capabilities available to that participant, and

wherein the system is further configured

- (i) to associate a participant
  - (1) with each workstation at which the participant logs in and
- (ii) to route a videoconference call,
  - (1) for that participant,
  - (2) to the workstation at which that participant is logged in.

Cancel claims 29 to 33

- 34. The teleconferencing system of claim 28, wherein the system is further configured to:
- (a) convert signals of one format to another format, whereby the teleconferencing system can support originating and reproduction devices based on different signal format standards.
- 35. The teleconferencing system of claim 28, wherein the system is configured to combine the captured images of a first and second participant into a mosaic image for reproduction at least one workstation.
- 36. The teleconferencing system of claim 28, further comprising an audio summer for receiving the captured audio of a first, second and third participant and combining the received audio of the second and third participants into an audio sum for reproduction at the workstation of the first participant.

- 37. The teleconferencing system of claim 28, further comprising:
- (a) at least one signal router for routing at least the AV signals among participant's workstations in such a way so as to optimize the carrying of AV signals between the workstations.
- 38. The teleconferencing system of claim 28, wherein the system is further configured to:
- (a) allow a participant to select the image one participant whose image is reproduced in the mosaic image and thereby replace the mosaic image with the selected image.
- 39. (Proposed Amendment) A method for conducting a teleconference among a plurality of participants having workstations with associated monitors for displaying visual images, and with associated AV capture and reproduction capabilities for capturing and reproducing video images and spoken audio of the participants, the workstations being interconnected by a first network, the network providing a data path for carrying digital data signals among the workstations, the method comprising the steps of:
- (a) managing a data conference during which data is shared in real-time among a plurality of the participants and displayed on the monitors of their respective workstations;
- (b) [moving AV signals representing video images and spoken audio of the participants among said workstations;
- (c)] managing a videoconference during which the video image and spoken audio of one of the participants is reproduced in real-time at the workstation of another of the participants;

- [(d)] (c) providing at least one AV [reproduction] device with associated capabilities of [reproducing] providing at least audio and/or video signals [at] to a workstation;
- (e) (d) defining at least one directory of AV [reproduction] devices and each device's associated capabilities;
- [(f)] (e) processing a request for a [reproduction service] <u>audio and/or video</u>

  <u>signals</u> to cause an appropriate AV [reproduction] device to provide the requested [reproduction service] <u>signals</u> to the workstation; and
  - [(g)](f) managing connections between participants by
    - (i) associating a participant
      - (1) with each workstation at which the participant logs in and
    - (ii) routing a videoconference call,
      - (1) for that participant,
  - (2) to the workstation at which that participant is logged in,

wherein the step of managing the video conference is conducted among a plurality of participants such that, if at least one capability of the set of capabilities consisting of audio capture, audio reproduction, video capture, video reproduction, and the capability of connecting to the first network, is not available to at least one of the participants, each of the plurality of participants can participate in the teleconference to the extent of the capabilities available to the participant.

40. The method of claim 39, further comprising the steps of:

- (a) tracking the audio and video capabilities associated with each workstation; and
- (b) processing a call, from a second to a first participant, by including a request for a service with respect to the first participant, based on the capabilities associated with the first participant.

Cancel claim 41

Please add the following claims:

- 42. The system of claim 27, wherein the AV device
  - (i) has associated capabilities of any one of the group consisting of
    - (1) storing one or more of digital data, audio or video signals;
    - (2) retrieving one or more of stored digital data, audio, and video signals;
    - (3) generating one or more of digital data, audio and video signals; and
  - (4) accessing a remote source of digital data, audio and video signals and providing the accessed signals to a workstation.
- 43. The system of claim 42, wherein the AV device is any one or more of:
  - (a) a VCR;
  - (b) a laser disk player;
  - (c) a compact disk player;
  - (d) a multimedia resource;
  - (e) a television signal source; and
  - (f) a fax machine.

- 44. The system of claim 28, wherein the AV device
  - (i) has associated capabilities of any one of the group consisting of
    - (1) storing one or more of digital data, audio or video signals;
    - (2) retrieving one or more of stored digital data, audio, and video signals;
    - (3) generating one or more of digital data, audio and video signals; and
  - (4) accessing a remote source of digital data, audio and video signals and providing the accessed signals to a workstation.
- 45. The system of claim 44, wherein the AV device is any one or more of:
  - (a) a VCR;
  - (b) a laser disk player;
  - (c) a compact disk player;
  - (d) a multimedia resource;
  - (c) a television signal source; and
  - (f) a fax machine.
- 46. The method of claim 23, wherein the AV device
  - (i) has associated capabilities of any one of the group consisting of
    - (1) storing one or more of digital data, audio or video signals;
    - (2) retrieving one or more of stored digital data, audio, and video signals;
    - (3) generating one or more of digital data, audio and video signals; and
  - (4) accessing a remote source of digital data, audio and video signals and providing the accessed signals to a workstation.
- 47. The apparatus of claim 46, wherein the AV device is any one or more of:
  - (a) a VCR;

- (b) a laser disk player;
- (c) a compact disk player;
- (d) a multimedia resource:
- (e) a television signal source; and
- (f) a fax machine.
- 48. The method of claim 39, wherein the AV device
  - (i) has associated capabilities of any one of the group consisting of
    - (1) storing one or more of digital data, audio or video signals;
    - (2) retrieving one or more of stored digital data, audio, and video signals;
    - (3) generating one or more of digital data, audio and video signals; and
  - (4) accessing a remote source of digital data, audio and video signals and providing the accessed signals to a workstation.
- 49. The method of claim 48, wherein the AV device is any one or more of:
  - (a) a VCR;
  - (b) a laser disk player;
  - (c) a compact disk player;
  - (d) a multimedia resource;
  - (e) a television signal source; and
  - (f) a fax machine.
- 50. The system of claim 27, wherein the AV path
  - (i) is at least partly defined by unshielded twisted pair (UTP) wiring.
- 51. The system of claim 28, wherein the AV path